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BULLETIN

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ENAMELS ON METAL

JAPANESE

The art of enameling on metal appears to have been introduced into Japan from China toward the end of the sixteenth century. The earliest pieces of Japanese enamels which have come down to us show a marked similarity in coloring, design and treatment to the Chinese works of the Ming Dynasty.

The cloisonné enamels of Japan are of three distinct varieties, as follows:

I. EARLY PERIOD (previous to the eighteenth century).

II. MIDDLE PERIOD (eighteenth century).

(a) With bound rims.

(b) With unbound rims.

III. MODERN (late nineteenth century).

It is only within a comparatively few years that the enamels of Japan have attracted the attention of western collectors, and they have not yet been studied sufficiently to permit of their being divided into distinct schools, to which future investigations will probably show they belong.

I. EARLY PERIOD

The enamels of this period, which is believed to have practically extended through the seventeenth century, are applied to beaten copper of great thinness. Bowls and deep dishes are forms most commonly found. The execution is coarse but vigorous and effective. The decorative designs are conventional and frequently include figures of animals, fishes and birds. These productions reveal more or less of the Chinese influence in coloring and treatment. A striking characteristic of the enamels of the Early and Middle Periods is the frequent employment of green grounds.

II. MIDDLE PERIOD

The enamel work of the eighteenth century is distinguished by the light weight of the copper foundation, which sometimes does not exceed one twenty-fourth to one-sixteenth of an inch in thickness. The decorations are of great delicacy and exactitude, a favorite style of treatment being the employment



CLOISONNÉ ENAMELS
JAPANESE, EARLY PERIOD

of geometrical, plaid and diaper patterns, frequently consisting of medallions of circular and other shapes, the ground being divided up into numerous irregular spaces, each one enameled in a different pattern. Frequently both sides of the metal are decorated in this manner. The forms of vessels are often ungainly and awkward, and the handles of vases, in the shape of semi-circles or trunks of elephants, frequently present an incongruous appearance. The work of this period, however, marked the highest development of the art of enameling in Japan, all traces of Chinese influence having disappeared. Among the decorations are often found the kiri and kiku crests or badges of the imperial family. The kiri crest is composed of three leaves from which rise three flowers of the kiri tree. The kiku insignia is a conventionalized rendering of the chrysanthemum flower, consisting of a small circle surrounded



CLOISONNÉ ENAMELS
JAPANESE, MIDDLE PERIOD

usually by sixteen lobes, but sometimes numbering more or less, arranged in a circle. These devices are used in a variety of modified forms. Sometimes they are placed in the ground-work, but more often occupy a conspicuous position as central decorations of fan-shaped or other medallions. Among the chimerical animal forms, the ho ho bird, the dragon and the kirin figure most frequently. The most common shape of the

vases of this period is oviform with a trumpet-shaped top, standing on a base of inverted trumpet- or bowl-form, or on three or four spreading flange-shaped feet.

The ground work of Japanese enamels of the Middle Period is of numerous varieties of geometrical diaper patterns formed by metal *cloisons*, such as the "checker-board," the "cube," the "shuttle," the "scale," etc. The "shuttle" design consists of small boat-shaped ornaments disposed in regular rows. The "scale" pattern is composed of semi-circular *cloisons* arranged like the scales



CLOISONNÉ ENAMELS
JAPANESE, MIDDLE PERIOD

of a fish. The "cube" diaper is made up of rhomboidal or square figures representing cubical blocks seen in perspective. There are many other ground patterns composed of minute circles, stars, rhombs, flowerets, dots and curls.

III. MODERN PERIOD

A. *Cloisonné Enamels on Porcelain*

It was probably not until about the middle of the nineteenth century that cloisonné enameling was applied to pottery and porcelain by Japanese artists. The earliest attempts were in imitation of the older enameling upon

copper, in which green grounds were frequently used. In more recent years, this branch of the art has been extensively developed, and at the present time many examples of cloisonné porcelain are to be found in public and private collections. The enamels are necessarily softer than those used upon metal bases, being fired at a lower temperature, and they lack the brilliant polish of some of the older works.

B. *Cloisonné Enamels on Copper*

At Yokohama, at Kioto and in the Province of Owari, enameling on copper has been carried on since the middle of the nineteenth century. These modern enamels are coarse and lack the delicacy of the older wares. The colors are brilliant—usually bright turquoise, yellow, brown and black. The metal base is thicker and heavier and frequently cast.

C. *Translucent Enamels on Metal*

Another variety of enamel of recent times is that in which transparent pastes are used. Circular dishes are painted with buff-colored grounds and decorated with floral designs and inscriptions in gold and other lacquers.

D. *Painted Enamels*

During the last quarter of the nineteenth century, certain Japanese artists developed the painting of plain enamel to a high degree of perfection. Instead of entirely covering the surface with patterns of enamel work, they went to the other extreme by painting on the white or delicately tinted ground a flying stork, a wild goose, a cluster of plant forms, a simple representation of the moon, or a mountain peak. In some instances, metal *cloisons* were sparingly used to enclose the painted designs. Occasionally the wires were introduced in the colored pictures to emphasize the details, as outlines of the stalks of plants or veins of leaves, taking the place of gilding in the decorations.

An enormous vase of this character in the Museum collection was purchased at the St. Louis Exposition in 1894. It measures thirty-nine inches in height, without the stand, and is covered with enamel which gradually changes from a pale buff tint below to terra cotta above. On one side is a painted cluster of foliage, among which doves of life-size, in natural colors, are perched.

E. A. B.



LACQUERED AND PAINTED FURNITURE

Mrs. Edward T. Stotesbury has presented to the Pennsylvania Museum and School of Industrial Art two important pieces of furniture, purchased by her in Venice, that illustrate an art technique hitherto unrepresented in the collections therein stored.

One of the pieces is a "commode" or chest of three drawers, four feet long by two feet ten inches in width and two feet ten inches in height, that